NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

PRESCRIBED BURNING

(Acre)
CODE 338

DEFINITION

Applying controlled fire to predetermined area.

PURPOSES

- To control undesirable vegetation.
- Prepare sites for planting or seeding.
- Control plant disease.
- Reduce wildfire hazards.
- Improve wildlife habitat.
- Improve forage production quantity and/or quality.
- Slash and debris removal.
- Enhance seed and seedling production.
- To facilitate distribution of grazing and browsing animals.

CONDITIONS WHERE PRACTICE APPLIES

Practice applies on all landuses except annually tilled cropland.

CRITERIA

The procedure, equipment, and the number of trained personnel shall be adequate to accomplish the intended purpose. The timing of the burn will be based on, as a minimum: relative humidity, wind conditions, air temperature, and fuel conditions.

Adjoining landowners within the airshed will be notified prior to burning.

Burn the entire pasture if feasible. When all of a pasture is not burned, grazing management for the pasture will be based on the needs of the burned area.

Planning for rest and grazing periods following the burn will be a part of the burn plan. All grazing lands will have deferred grazing planned immediately following the burn and/or the area burned will be part of a long-range planned grazing system that allows partial rest to each pasture during each growing season. This rest is extremely important when reducing brush canopy cover and improving forage quality and quantity. (See 528a - Prescribed Grazing)

Develop a Fire Prescription and burn plan. The burn plan is to designate a fire boss.

Dimensions and types of fireguard will be designed for each burn and recorded in the burn plan.

A 24-hour weather forecast will be obtained prior to doing a prescribed burn. This weather forecast can be obtained from the National Weather Service, Albuquerque, NM. (505)244-9148 or U.S. Fire Weather Forecast on the Internet at http://fire.boi.noaa.gov/

Conservationists planning with landusers and the State Forestry Division must adhere to the legal restraints in the New Mexico State Statutes Annotated 1978. (Chapters 30-17-1 and68-2-8)

This practice will be applied in accordance with all state and local laws and ordinances.

Liability and safety precautions are to be planned before the burn and monitored during the burn. Protect sensitive wildlife habitat, headquarters, oil and gas sites, power line poles, highly erodible areas or other areas that would be unsafe to burn.

NRCS employees will no act as burn boss, drop the match or carry a torch.

NRCS employees will act in accordance with all Federal, state, and local laws and within the scope of their work. The job approval authority and/or certification level that has been attained will restrict the extent to which an NRCS employee may provide technical assistance.

To the extent those NRCS employees are acting within the scope of their work and have the proper job approval authority they may assist as follows:

- Assist in development of burn plan.
- Provide resource information such as soils, vegetation, production, maps, photos, climate data etc.

CONSIDERATIONS

Wildlife

Burning should be managed with consideration for wildlife needs such as nesting and feeding cover.

Wildlife habitat can be improved, not by reducing the amount of brush, but rather by making it more available. Cooler fires should be used when burning root-sprouting brush species to burn the brush back to a height below the normal browse line of wildlife.

Wildlife habitat can be improved for various species by burns of different sizes, frequencies, and intensities that create mosaic patterns and produce "edge effect."

Control Undesirable Vegetating

When brush suppression is the objective, the fine fuels should be evenly distributed through out the burn area to carry the fire.

Avoid burning immediately after heavy seed crops of big sagebrush. Seedlings of Big sagebrush can come back very quickly to compete with desirable grasses.

After chaining or dozing of mature juniper, burning is not recommended for 3 to 5 years. The delay will allow juniper seeds to germinate and be killed by the burn.

Proper herbicide application is an effective follow-up method of control that should be considered on burns carried out to reduce root-sprouting species. (Mesquite, Alligator juniper, Redberry juniper, Oak species, and Algerita are vigorous sprouters)

Improve Forage Production and/or Quality

Plant response to burning results in increased palatability, quality, quantity, and availability of grasses and forbs. Dead material low in nutrient value is removed, new growth high in protein, phosphorous, and calcium becomes readily available. Grazing management following the burn must be designed to allow for the desired response of forage species and to aid in accomplishing the burn objectives.

Wildfire Hazard

When burning is used to reduce hazardous fuel loads it is not necessary to achieve 100 percent coverage of the entire area. The objective is to break up the fuel continuity.

Slash and Debris Removal

When burning in slash-strewn areas, ideal 10-hour time-lag fuel moisture content is 7-12%. When the 10 hour time-lag moisture is <6%, areas should not be burned due to volatility. Under these conditions spot fires are almost certain to occur.

Soil Erosion

Soil texture and slope influence soil erodibility following a burn. Burning of coarse textured sandy soils or on slopes greater than 20% can increase soil erosion rates for several years following the burn.

Seeding

Burning is a good pre-treatment to prepare an area for seeding. Broadcast seed following burning before rain has settled the ash.

Other Considerations

Existing barriers such as lakes, streams, wetlands, roads, and constructed firebreaks are important to the design and layout of this practice and should be used as firebreaks.

PLANS AND SPECIFICATIONS

This standard is not intended to encompass all site-specific situations. Experience and judgement must be used in site-specific instances.

Specifications (burn plan) for burning shall be prepared for each site. Specifications shall be recorded using Conservation Practice Job Sheet 338 for Prescribed Burning.

OPERATION AND MAINTENANCE

Operation and maintenance requirements are not applicable for this practice.